Teacher Answer Key

Case Study

1. Auditing chain-of-custody logs, matching seal numbers/identifiers, and confirming intact tamper-evident seals protect against mislabeling and contamination claims.

2. The B sample is an independent sealed confirmation, reducing the chance that a single error or contamination explains the result.

Multiple Choice

1. A

2. C

3. A

Matching

1-D, 2-A, 3-B, 4-E, 5-C

Fill-in-the-Blank

1) chain, 2) sensitivity, 3) B

Short Answer (Sample Responses)

Q1: Advanced tests still depend on correct collection, sealing, storage, and labeling; without procedure, results can't be trusted or defended.

Q2: Knowing samples can be retested later lowers the "wait it out" strategy and increases the risk of getting caught years after competition.

Q3: Calibration and control runs show the instrument and method performed correctly, helping rule out lab error or unreliable measurement.